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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,753	03/18/2004	Jacob Charles Forney III	CTR/215US	6878
26875	7590	11/14/2006		
WOOD, HERRON & EVANS, LLP 2700 CAREW TOWER 441 VINE STREET CINCINNATI, OH 45202				
EXAMINER KNABLE, GEOFFREY L				
ART UNIT		PAPER NUMBER		
1733				

DATE MAILED: 11/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/803,753

Applicant(s)

FORNEY ET AL.

Examiner

Geoffrey L. Knable

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-28 is/are allowed.
- 6) ☒ Claim(s) 1-8 and 11-14 is/are rejected.
- 7) ☒ Claim(s) 9 and 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

1. Applicant's election without traverse of group I, claims 1-28 in the reply filed on 8-31-2006 is acknowledged.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 1, 2, 6, 7, 13 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Collier (US 917,545).

Collier is applied for the same reasons as set forth in the last office action. As to the amendment to claim 1, given that the tube includes two openings and the fill material is a fluent material, each of the openings is *capable of* receiving the fill composition - while the fill composition is in fact only filled through one of the openings, it is capable of being received in either or both. Applicant has stressed the presence of the pistons "d" in arguing that the material would or could not be introduced through the outlet "c". This argument has been carefully considered but is unpersuasive. First, it is noted that the pistons "d" are in fact apparently removed from the final tire (page 2, lines 19-45) - the final tire is thus simply a filled toroidal tube with two openings, either being capable of receiving the fill. Further, it is noted that another embodiment of the tire (fig. 6) does not even use pistons, this likewise being considered to define a tire including a tube and fill with two openings that are capable of receiving the fluent fill as claimed.

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Collier (US 917,545) as applied above, and further in view of the admitted state of the prior art.

Collier suggests filling with a sponge or foam material but does not specifically describe the composition thereof. At page 3, lines 7+ of the specification, it is admitted

Art Unit: 1733

that polyurethane foam materials are known to be suitable and effective tire filling materials, their use as the filling material in Collier being therefore obvious with a reasonable expectation of providing a suitably functioning material.

5. Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Collier (US 917,545) as applied above, and further in view of Smith et al. (US 2,709,471).

As to claims 4-5, Collier does not provide any specific requirements for the hardness of the fill material. It is however considered to have been well within the skill of the ordinary artisan to select an appropriate hardness of the fill to yield the desired end product characteristics through routine optimization, only the expected results following any particular selection. Note further Smith et al., also directed to non-pneumatic tires including a cushioning fill material (13), provides evidence that the ordinary artisan understands that Shore durometer hardnesses thereof of 30-75 are known to be suitable and effective for such layers (col. 2, lines 22-28), this further indicating that selection of values within the claimed range would have been obvious to the artisan with a reasonable expectation of providing a suitable and effective resilient tire filling.

6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Collier (US 917,545).

As to claim 8, Collier would have been understood by the ordinary artisan as suggesting/contemplating rubber for the tire/tube but does not further characterize specifics of the composition (other than it be elastic/flexible). Collier does however

Art Unit: 1733

indicate that the tire/tube can be made "without canvas insertion" (page 1, lines 57-63), this seemingly suggesting that additional reinforcing material is not necessary. Further, to the extent that this claim is referring to typical rubber reinforcing agents (carbon black, etc.), it is considered that the artisan would have determined whether reinforcing agents are needed and been able to select accordingly, it being submitted that the particular application contemplated (i.e. type of vehicle/tire/use) would have been used by the artisan in determining whether or not reinforcing agents are needed through only routine optimization, only the expected results following either selection.

7. Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Collier (US 917,545) as applied above, and further in view of at least one of [Clark (US 636,896), Alexander et al. (US 662,160) and Hendey (US 758,209)].

Collier indicates that the tire is a single tube tire and may include canvas insertion but does not provide details of the carcass or tread configuration/construction. It however is well known in this art that single tube tires are typically formed using plural layers and with a thicker and thus raised area in the tread area - Clark, Alexander et al, and Hendey are merely exemplary. To configure the tube/tire in Collier in such conventional manner would therefore have been obvious. Inclusion of a tread pattern would likewise have been obvious, it being extremely well known to include tread patterning to help improve wet traction.

8. Claims 9 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. Claims 15-28 are allowed.

These claims are allowed/allowable for the reasons advanced by applicant, the prior rejections of these claims being withdrawn in view of the amendments to the claims and accompanying arguments.

10. Applicant's arguments filed 8-31-2006 have been fully considered but they are not persuasive as regards the remaining rejections.

Most of the prior art rejections have been withdrawn in view of the amendments to the claims and accompanying arguments. The rejections over Collier have however been maintained for the reasons advanced above, the arguments with respect to this reference being addressed within the statement of rejection above.

11. Applicant's amendment overcoming the previous rejections of several dependent claims necessitated the new ground(s) of rejection presented in this Office action to address these claims. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 1733

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey L. Knable whose telephone number is 571-272-1220. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Geoffrey L. Knable
Primary Examiner
Art Unit 1733

G. Knable
November 12, 2006